



Docket No.: M4065.0184/P184
(PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:
Alan G. Wood, et al.

Application No.: 09/594,510

Group Art Unit: 2825

Filed: June 16, 2000

Examiner: C. Luu

For: SEMICONDUCTOR DEVICE PACKAGE
AND METHOD

REQUEST FOR RECONSIDERATION

Box Non-Fee Amendment
Commissioner for Patents
Washington, DC 20231

Dear Sir:

In response to the Office Action dated February 14, 2002 (Paper No. 7), please reconsider the above-identified U.S. Patent application in light of the following remarks:

Claims 1, 5, 6, and 8-10 are rejected under 35 U.S.C. § 102 as being anticipated by Ohgiyama. Applicants respectfully traverse the rejection and request reconsideration. Claim 1 recites a "method of making semiconductor device packages, comprising: forming a layered assembly by attaching a wafer to a dielectric layer." Ohgiyama fails to disclose or suggest the use of an entire wafer consisting of several semiconductor chips, rather, Ohgiyama discloses a method in which each individual semiconductor chip (6) is fabricated by the process of mounting a semiconductor chip (6) on a die pad. Nowhere in the specification does Ohgiyama disclose a semiconductor wafer assembly attaching to a dielectric layer, Ohgiyama only discloses that a semiconductor chip (3) is bonded to a die pad by means of a layer of die bond material (2). Claims 5-10 depend upon independent claim 1 and are believed to be allowable along with claim 1 and for other reasons.

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Claims 11-12 and 17-18 are rejected under 35 U.S.C. § 102 as being anticipated by Farnworth. Applicants respectfully traverse the rejections and request reconsideration. Claim 11 recites “forming a layered assembly by attaching a semiconductor wafer and a metal layer to a dielectric layer.” Farnworth fails to disclose or suggest a metal layer between a wafer and the dielectric layer. Farnworth discloses a metal lead (44) on top of a dielectric layer, not a metal layer. Claims 12-18 depend upon independent claim 11 and are believed to be allowable along with claim 11 and for other reasons.

Claims 19-20 are rejected under 35 U.S.C. § 103 as being unpatentable over Farnworth in view of Gaynes et al. Applicants respectfully traverse the rejections and request reconsideration. Claim 19 recites “aligning a semiconductor wafer with respect to a dielectric tape.” Farnworth does not disclose or suggest the alignment of the semiconductor wafer before the dicing process. Furthermore, Gaynes discloses alignment (optical) but with reference to a single semiconductor chip and not a semiconductor wafer and also for positioning the transfer substrate to an attachment surface, not for the dicing of a semiconductor wafer. Claims 21-23 depend upon independent claim 19 and are believed to be allowable along with claim 19 and for other reasons.

Claims 35 and 37 are rejected under 35 U.S.C. § 103 as being unpatentable over Farnworth in view of Kobayashi et al. Applicants respectfully traverse the rejection and request reconsideration. Claim 35 recites “testing said semiconductor devices through several ball grid arrays.” Farnworth fails to disclose or suggest using the ball grid arrays to test the semiconductor, but rather, Farnworth discloses using a ball grid array for attachment to a circuit board, for connecting each lead to an electrical apparatus. Testing the semiconductor devices through the ball grid arrays is an important aspect of the invention of claim 35. Claim 37 depends from independent claim 35 and is believed to be allowable along with claim 35 and for other reasons.

Claims 36 and 38 are rejected under 35 U.S.C. § 103 as being unpatentable over Farnworth in view of Kobayashi et al. and further view of Lam. Applicants respectfully

traverse the rejection and request reconsideration. For the reasons set forth above for claim 35, the claims are believed to be allowable.

In view of the above, each of the presently pending claims in this application is believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to withdraw the outstanding rejection of the claims and to pass this application to issue.

Dated: May 8, 2002

Respectfully submitted,

By 

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